**PRODUCT VARIATIONS**

This policy applies to all HealthPartners Plans (HPP) lines of business unless noted below.

☑ Medicare Variation

For details regarding Medicare’s position for Hyperbaric Oxygen (HBO) Therapy please refer to the following:

*Related local and national coverage determination

- LCD L35021 Hyperbaric Oxygen (HBO) Therapy
- NCD 20.29 Hyperbaric Oxygen (HBO) Therapy

Where Medicare coverage documents address services/conditions, they supersede this policy.

**POLICY STATEMENT**

Hyperbaric oxygen (HBO) therapy is considered medically necessary for the following conditions when administered in a chamber (including the one man unit):

1. Acute carbon monoxide intoxication,
2. Decompression illness,
3. Gas embolism,
4. Gas gangrene,
5. Acute traumatic peripheral ischemia. HBO therapy is a valuable adjunctive treatment to be used in combination with accepted standard therapeutic measures when loss of function, limb, or life is threatened.
6. Crush injuries and suturing of severed limbs. As in the previous conditions, HBO therapy would be an adjunctive treatment when loss of function, limb, or life is threatened.
7. Progressive necrotizing infections (necrotizing fasciitis),
8. Acute peripheral arterial insufficiency,
9. Preparation and preservation of compromised skin grafts (not for primary management of wounds),
10. Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management,
11. Osteoradionecrosis as an adjunct to conventional treatment,
12. Soft tissue radionecrosis as an adjunct to conventional treatment,
13. Cyanide poisoning,
14. Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment,
15. Diabetic wounds of the lower extremities in patients who meet the following three criteria:
   a. Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes;
   b. Patient has a wound classified as Wagner grade III or higher; and
   c. Patient has failed an adequate course of standard wound therapy.

The use of HBO therapy is covered as adjunctive therapy only after there are no measurable signs of healing for at least 30 days of treatment with standard wound therapy and must be used in addition to standard wound care. Standard wound care in patients with diabetic wounds includes: assessment of a patient’s vascular status and correction of any vascular problems in the affected limb if possible, optimization of nutritional status, optimization of glucose control, debridement by any means to remove devitalized tissue, maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings, appropriate off-loading, and necessary treatment to resolve any infection that might be present. Failure to respond to standard wound care occurs when there are no measurable signs of healing for at least 30 consecutive days. Wounds must be evaluated at least every 30 days during administration of HBO therapy. Continued treatment with HBO therapy is not covered if measurable signs of healing have not been demonstrated within any 30-day period of treatment.

Hyperbaric oxygen (HBO) therapy is considered not medically necessary for the following conditions:
1. Cutaneous, decubitus, and stasis ulcers.
2. Chronic peripheral vascular insufficiency.
3. Anaerobic septicemia and infection other than clostridial.
4. Skin burns (thermal).
5. Senility.
7. Cardiogenic shock.
8. Sickle cell anemia.
9. Acute thermal and chemical pulmonary damage, i.e., smoke inhalation with pulmonary insufficiency.
10. Acute or chronic cerebral vascular insufficiency.
11. Hepatic necrosis.
12. Aerobic septicemia.
14. Tetanus.
15. Systemic aerobic infection.
16. Organ transplantation.
17. Organ storage.
18. Pulmonary emphysema.
19. Exceptional blood loss anemia.
20. Multiple Sclerosis.
22. Acute cerebral edema.

Topical Application of Oxygen

This method of administering oxygen does not meet the definition of HBO therapy as stated above and therefore, is not covered. Also, its clinical efficacy has not been established.

RELATED POLICIES

N/A

POLICY GUIDELINES

The diagnosis should be established by the referring or treating physician prior to the initiation of HBO therapy. Continued HBO therapy without documented evidence of effectiveness does not meet the definition of medically necessary treatment. Thorough re-evaluation should be made at least every 30 days for documentation of response to therapy. Documentation to support effectiveness of the therapy must be made available upon request to the Contractor.

HPP will cover a total of 60 Hyperbaric Oxygen sessions (99183) per 12 month period.

HPP will cover G0277 services up to 5 per day per beneficiary.
HBO therapy should not be a replacement for other standard successful therapeutic measures. Depending on the response of the individual patient and the severity of the original problem, treatment may range from less than 1 week to 1-2 months' duration, the average being 2 to 4 weeks. The use of Hyperbaric Oxygen Therapy for more than 2 months, (30 days for the treatment of diabetic wounds) regardless of the condition of the patient, is subjected to pre-service medical necessity review.

**DOCUMENTATION REQUIREMENTS**

In all cases, the appropriate documentation must be kept on file and, upon request, presented to Health Partners Plans.

1. The documentation present in the clinical record must provide an accurate description and diagnosis of the medical condition supporting that the use of HBO is reasonable and medically necessary. The medical documentation must include but is not limited to the following:
   - An initial assessment, which includes a history and physical that clearly substantiates the condition for which HBO is recommended. This should also include any prior medical, surgical and/or HBO treatments.
   - Documentation of the procedure (logs) including ascent time, descent time and pressurization level. There should be a treatment plan identifying timeline and treatment goals.
   - Physicians’ progress notes that describe the physical findings, type(s) of treatment(s) provided, number of treatments provided, the effect of treatment(s) received and the assessment of the level of progress made toward achieving the completion of established therapy goals.
   - Physician-to-physician communications or records of consultations and/or additional assessments, recommendations or procedural reports.

2. Laboratory reports (cultures or Gram stains) that confirm the diagnosis of necrotizing fasciitis are required and must be present as support for payment of HBO.

3. X-ray findings and bone cultures confirming the diagnosis of osteomyelitis are required and must be present as support for payment of HBO.

4. Documentation to support the presence of gas gangrene as proven with laboratory reports (Gram stain or cultures) and X-ray.

5. Documentation of date and anatomical site of prior radiation treatments.

6. Documentation supporting date of skin graft and compromised state of graft site.
For diabetic wounds of the lower extremity, the Wagner classification of the wound and the failure of an adequate course (at least 30 days) of standard wound therapy must be documented at the initiation of therapy:

Documentation must include criteria and exam consistency to establish the diagnosis of a Wagner's grade III wound.

Documentation of standard wound care in patients with diabetic wounds must include: assessment of a patient’s vascular status and documentation of correction of any vascular problem sufficient to impair wound healing in the affected limb; documentation of optimization of nutritional status; documentation of optimization of glucose control; documentation of debridement by any means to remove devitalized tissue; documentation of maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings; documentation of efforts for appropriate off-loading; and documentation of necessary treatment to resolve any infection that might be present. Failure to respond to standard wound care occurs when there is no documentation of measurable signs of healing for at least 30 consecutive days post optimization for healing. The medical record must include, at a minimum, a wound evaluation at least every 30 days during administration of HBO therapy.

**CODING**

**NOTE:** The Current Procedural Terminology (CPT®) codes and Healthcare Common Procedure Coding System (HCPCS) codes listed in this policy are for reference purposes only. Listing of a code in this policy does not imply that the service is covered and is not a guarantee of payment. Other policies and coverage guidelines may apply. When reporting services, providers/facilities should code to the highest level of specificity using the code that was in effect on the date the service was rendered. This list may not be all inclusive.

The following procedure codes may be used to represent ambulance services that are eligible for reimbursement consideration.

<table>
<thead>
<tr>
<th>Procedure Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>99183</td>
<td>Hyperbaric oxygen therapy</td>
</tr>
<tr>
<td>G0277</td>
<td>Hyperbaric oxygen under pressure, full body chamber, per 30 min interval</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0413</td>
<td>Respiratory Services - Hyperbaric Oxygen Therapy</td>
</tr>
</tbody>
</table>

*CPT® is a registered trademark of the American Medical Association.*
Hyperbaric Oxygen (HBO) Therapy

BENEFIT APPLICATION

Medical policies do not constitute a description of benefits. This medical necessity policy assists in the administration of the member’s benefits which may vary by line of business. Applicable benefit documents govern which services/items are eligible for coverage, subject to benefit limits, or excluded completely from coverage. This policy is invoked only when the requested service is an eligible benefit as defined in the Member’s applicable benefit contract on the date the service was rendered. Services determined by the Plan to be investigational or experimental are excluded from coverage for all lines of business. For Medicaid members under 21 years old, benefits and coverage are always based on medical necessity review.

DESCRIPTION OF SERVICES

Hyperbaric oxygen (HBO) therapy is a modality in which the entire body is exposed to oxygen under increased atmospheric pressure. The patient is entirely enclosed in a pressure chamber breathing 100% oxygen (O₂) at greater than one atmosphere pressure. Either a mono-place chamber pressurized with pure O₂ or a larger multi-place chamber pressurized with compressed air where the patient receives pure O₂ by mask, head tent, or endotracheal tube may be used.

HBO therapy serves four primary functions:

1. It increases the concentration of dissolved oxygen in the blood, which augments oxygenation to all parts of the body; and
2. It replaces inert gas in the bloodstream with oxygen, which is then metabolized by the body; and
3. It may stimulate the formation of a collagen matrix and angiogenesis; and
4. It acts as a bactericide for certain susceptible bacteria.

Developed as treatment for decompression illness, this modality is an established therapy for treating medical disorders such as carbon monoxide poisoning, gas gangrene, acute decompression illness and air embolism. HBO is also considered acceptable as adjunctive therapy in the treatment of sequella of acute vascular compromise and in the management of some disorders that are refractory to standard medical and surgical care or the result of radiation injury.

CLINICAL EVIDENCE

N/A

DEFINITIONS

N/A
DISCLAIMER

Approval or denial of payment does not constitute medical advice and is neither intended to guide nor influence medical decision making.

POLICY HISTORY

This section provides a high-level summary of changes to the policy since the previous version.

<table>
<thead>
<tr>
<th>Summary</th>
<th>Version</th>
<th>Effective Date</th>
</tr>
</thead>
</table>

REFERENCES
